Appl. No. 10/813,790

Response Dated January 8, 2007

Reply to Notice of Non-Compliant Amendment of December 13, 2006

Please replace the abstract with the following amended paragraph:

Method and apparatus to perform reconfigurable parallel processing are described wherein a switch, connected to the control units and data paths, may be configured to establish a first set of connections between a plurality of control units and a plurality of data paths to execute a first process using single instruction multiple data processing, and a second set of connections between the control units and the data paths to execute a second process using multiple instruction multiple data processing.